

Claims

- [1] A condensing apparatus of a dish washer for condensing vapor inside a dish washer tub, the condensing apparatus comprising:
a blower for suctioning the vapor from inside the tub; and
an air duct connected to the blower and forming a vapor passage for circulating the vapor and generating condensed water; wherein the vapor passage includes a ridge formed thereon for stopping the condensed water.
- [2] The condensing apparatus according to claim 1, wherein the vapor passage forms a meander line.
- [3] The condensing apparatus according to claim 1, wherein the vapor passage further includes a straight portion and a curved portion, and the ridge is formed at a transitional point from the straight portion to the curved portion.
- [4] The condensing apparatus according to claim 1, wherein the vapor passage includes a straight portion, and the ridge is formed on the straight portion.
- [5] The condensing apparatus according to claim 1, wherein the air duct includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor.
- [6] The condensing apparatus according to claim 5, wherein the air duct further includes a portion between the condensed water discharge port and the vapor exhaust port, the portion being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.
- [7] The condensing apparatus according to claim 1, wherein the blower includes a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the air duct, and a dryer fan for providing suctioning force to suction vapor from inside the tub.
- [8] The condensing apparatus according to claim 7, wherein the blower further includes a motor for driving the condenser fan and the dryer fan together.
- [9] A condensing apparatus of a dish washer having an air duct for suctioning and condensing vapor from inside a dish washer tub, the condensing apparatus comprising:
a vapor passage formed in the air duct for circulating the vapor suctioned from inside the tub and generating condensed water; and a ridge formed on the vapor passage for stopping the condensed water.
- [10] The condensing apparatus according to claim 9, wherein the vapor passage forms

a meander line.

- [11] The condensing apparatus according to claim 9, wherein the vapor passage includes a straight portion and a curved portion, and the ridge is formed at a transitional point from the straight portion to the curved portion.
- [12] The condensing apparatus according to claim 9, wherein the vapor passage includes a straight portion, and the ridge is formed on the straight portion of the vapor passage.
- [13] The condensing apparatus according to claim 9, wherein the air duct includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor.
- [14] The condensing apparatus according to claim 13, wherein the air duct further includes a portion between the condensed water discharge port and the vapor exhaust port, the portion being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.
- [15] The condensing apparatus according to claim 9, further comprising a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the air duct, and a dryer fan for providing suctioning force to suction vapor from inside the tub.
- [16] A condensing apparatus of a dish washer for condensing vapor inside a dish washer tub, the condensing apparatus comprising:
 - a dryer fan for providing suctioning force to suction vapor from inside the tub;
 - an air duct forming a vapor passage for circulating the suctioned vapor and generating condensed water and a ridge formed on the vapor passage for stopping the condensed water; and
 - a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the vapor passage.
- [17] The condensing apparatus according to claim 16, wherein the vapor passage forms a meander line.
- [18] The condensing apparatus according to claim 16, wherein the vapor passage has a straight portion and a curved portion, and the ridge is formed on at least one of a transitional point from the straight portion to the curved portion or a straight portion.
- [19] The condensing apparatus according to claim 16, wherein the air duct further includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor, a

portion of the air duct between the condensed water discharge port and the vapor exhaust port being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.

- [20] The condensing apparatus according to claim 16, wherein the condenser fan and the dryer fan are driven together by a single motor.